

Response
Serial No. 09/921,057
Page 2

IN THE CLAIMS

Please reconsider the claims as follows:

1. (original) An apparatus for suggesting available content in a digital communications network, comprising: a content metadata crawler that searches metadata related to the available content and produces a metadata list, wherein the metadata list comprises a plurality of metadata elements, and wherein each metadata element comprises one or more metadata fields; a suggestion keyword indexer coupled to the content metadata crawler, wherein the suggestion keyword indexer receives the metadata list and indexes the metadata elements; a suggestion database coupled to the suggestion keyword indexer that stores the indexed metadata elements; and a suggestion database processor coupled to the content metadata crawler, the suggestion keyword indexer and the suggestion keyword database, wherein the suggestion database processor searches the suggestion database, based on one or more search request criteria, to produce a list of keywords to be used to suggest content.
2. (currently amended) The apparatus of claim 1, wherein the suggestion keyword indexer, comprises: an extraction module that extracts and caches a value of each metadata field; a parsing module coupled to the extraction module that parses contents of uniquely identifying metadata fields, wherein the contents of a uniquely identifying field comprise[[s]] one or more word items; a classifying module coupled to the parsing module that classifies one or more of the one or more word items; a comparison module coupled to the classifying module that compares one or more of the one or more word items to determine a list of related terms; and an index matrix record builder that creates and augments an index matrix record for each of the classified word items.
3. (original) The apparatus of claim 2, further comprising one or more of a dictionary database, a thesaurus database and a lexicon database, wherein the comparison module compares a word item to entries in one or more of the dictionary database, the

Response
Serial No. 09/921,057
Page 3

thesaurus database and the lexicon database, and wherein the list of related terms includes one or more of a dictionary definition, lexicon data, and one or more synonyms.

4. (original) The apparatus of claim 2, wherein the classifying module comprises one or more computational linguistics tools, including a rule-based part-of-speech tagging algorithm and a stochastic part-of-speech tagging algorithm, wherein the one or more computational linguistic tools determine part-of-speech data of a word item, and wherein the index matrix record builder adds the part-of-speech data to the index matrix record for the word item.
5. (original) The apparatus of claim 2, wherein the uniquely identifying fields comprise one or more of content type, content title, date of production, rating and parental notice information, performer, artist, writer, author, plot summary, keyword list, and textual content description.
6. (original) The apparatus of claim 2, wherein the index matrix record builder comprises a vector assignment module that assigns a word item vector value for a word item, wherein the word item vector value may be used as a measure of similarity between a word item and a related term.
7. (original) The apparatus of claim 6, wherein the suggestion database processor, comprises: a vector determination module that assigns a search term suggestion vector range to one or more of the search request criteria; and a vector value comparator that compares a vector value of a search term and the word item vector value to determine if the word item vector value falls within the suggestion vector range of the search term, wherein word items that fall within the suggestion vector range may be used to search for suggested content.
8. (original) The apparatus of claim 7, wherein the suggestion vector range is adjustable by a user of the apparatus.

Response
Serial No. 09/921,057
Page 4

9. (original) The apparatus of claim 8, further comprising a user-defined filter, comprising: a user history filter; a user profile filter; and an approved content access filter, wherein the suggestion database processor processes search results from the suggestion database using the user-defined filter to produce the list of suggested content.
10. (original) The apparatus of claim 9, further comprising a ranking module, wherein the ranking module ranks content in the list of suggested content.
11. (currently amended) The apparatus of claim 10, [[where in]]wherein the ranking module ranks the content according to one or more of a user historical analysis report and similarities to previously accessed content by the user.
12. (withdrawn) A method for suggesting available content in a digital communications network, comprising: receiving a search request from a user of the digital communications network; comparing the search request to a database of indexed metadata elements; caching indexed metadata elements that satisfy the search request; retrieving a user profile for the user; and filtering the cached metadata elements according to the user profile ranking the filtered metadata elements; and providing the ranked metadata elements to a search request processor as criteria for returning suggested content.
13. (withdrawn) The method of claim 12, wherein the database of indexed metadata elements, comprises one or more of content type, content title, date of production, rating and parental notice information, performer, artist, writer, author, plot summary, keyword list, and textual content description.
14. (withdrawn) A method for suggesting available content in a digital communications network, comprising: constructing a database of indexed metadata

Response

Serial No. 09/921,057

Page 5

elements; receiving a content search request from a user of the digital communications network; comparing the search request to the database of indexed metadata elements; caching indexed metadata elements that satisfy the search request; retrieving a user profile for the user; filtering the cached metadata elements according to the user profile; ranking the filtered metadata elements; and providing the ranked metadata elements to a search request processor as criteria for returning suggested content.

15. (withdrawn) The method of claim 14, wherein constructing the database of indexed metadata elements, comprises: opening one or more metadata records in the content metadata database; for a current one of the one or more metadata records, determining if end-of-file has been reached, reading an entire metadata entry of the current metadata record, wherein the current metadata record comprises one or more of one or more non-uniquely identifying fields and one or more uniquely identifying fields, and wherein each of the one or more uniquely identifying fields comprises one or more terms, extracting and caching a value for each term for one or more of the one or more uniquely identifying fields, and parsing and caching terms of each of the uniquely identifying fields.

16. (withdrawn) The method of claim 15, further comprising, for each cached term: determining if an index record exists for the cached term; and if no index record exists, creating an index matrix record, and adding the cached value to the index matrix record.

17. (withdrawn) The method of claim 16, wherein creating the index matrix record, comprises: determining a part of speech of the term to determine part of speech data; comparing the term to thesaurus data to determine similar terms, and storing the part of speech data and the similar terms as the index matrix record.

18. (withdrawn) The method of claim 15, wherein a metadata crawler crawls a content metadata database of indexed metadata elements to construct the database of indexed metadata elements.

450019-1

Response
Serial No. 09/921,057
Page 6

19. (withdrawn) The method of claim 18, wherein the metadata crawler crawls the content metadata database continually.
20. (withdrawn) The method of claim 18, wherein the metadata crawler crawls the content metadata database when directed by a metadata processor.
21. (withdrawn) An apparatus for suggesting available content in a digital communications network, comprising: first searching means for searching metadata related to the available content and producing a metadata list, wherein the metadata list comprises a plurality of metadata elements, and wherein each metadata element comprises one or more metadata fields; means, coupled to the first searching means, for receiving the metadata list and indexing the metadata elements; means, coupled to the indexing means, for storing the indexed metadata elements; and second searching means, coupled to the first searching means, for searching the storing means, based on one or more search request criteria, to produce a list of metadata elements to be used to suggest content.
22. (currently amended) The apparatus of claim 21, wherein the indexing means, comprises: extraction means for extracting and caching a value of each metadata field; parsing means coupled to the extraction means, for parsing contents of uniquely identifying metadata fields, wherein the contents of a uniquely identifying field comprise[[s]] one or more word items; classifying means, coupled to the parsing means, for classifying one or more of the one or more word items; comparing means coupled to the classifying means for comparing one or more of the one or more word items to determine a list of related terms; and means for creating and augmenting an index matrix record for each of the classified word items.
23. (original) The apparatus of claim 22, further comprising one or more of a dictionary database, a thesaurus database and a lexicon database, wherein the

Response

Serial No. 09/921,057

Page 7

comparing means compares a word item to entries in one or more of the dictionary database, the thesaurus database and the lexicon database, and wherein the list of related terms includes one or more of a dictionary definition, lexicon data, and one or more synonyms.

24. (original) The apparatus of claim 22, wherein the classifying module comprises means for analyzing linguistics.

25. (original) The apparatus of claim 24, wherein the means for analyzing linguistics comprises one or more computational linguistics tools, including a rule-based part-of-speech tagging algorithm and a stochastic part-of-speech tagging algorithm, wherein the one or more computational linguistic tools determine part-of-speech data of a word item, and wherein means for creating and augmenting an index matrix record adds the part-of-speech data to the index matrix record for the word item.

26. (original) The apparatus of claim 22, wherein the uniquely identifying fields comprise one or more of content type, content title, date of production, rating and parental notice information, performer, artist, writer, author, plot summary, keyword list, and textual content description.

27. (original) The apparatus of claim 22, wherein the means for creating and augmenting an index matrix record comprises means for assigning a word item vector value for a word item, wherein the word item vector value may be used as a measure of similarity between a word item and a related term.

28. (original) The apparatus of claim 27, wherein the second searching means, comprises: means for assigning a search term suggestion vector range to one or more of the search request criteria; and means for comparing a vector value of a search term and the word item vector value to determine if the word item vector value falls within the suggestion vector range of the search term, wherein word items that fall within the

Response
Serial No. 09/921,057
Page 8

suggestion vector range may be used to search for suggested content.

29. (original) The apparatus of claim 28, wherein the suggestion vector range is adjustable by a user of the apparatus.
30. (original) The apparatus of claim 29, further comprising means for filtering search results.
31. (original) The apparatus of claim 30, wherein the means for filtering search results, comprises: a user history filter; a user profile filter; and an approved content access filter, wherein the means for creating and augmenting an index matrix record processes search results from the means for storing the indexed metadata elements using the user-defined filter to produce the list of suggested content.
32. (original) The apparatus of claim 31, further comprising means for ranking content in the list of suggested content.
33. (original) The apparatus of claim 32, where in the ranking means ranks the content according to one or more of a user historical analysis report and similarities to previously accessed content by the user.